A COMPARATIVE ANALYSIS OF THE PROFITABILITY OF SELECTED TEA COMPANIES IN INDIA

Dr. R. K. Patel[1], B. J. Barot[2]

[1] Research Guide, Head of Accountancy Department, Desai C.M. Arts and Commerce College, Viramgam
[2] Research scholar, S.D. School of Commerce, Gujarat University, Ahmedabad, Gujarat

ABSTRACT

Tea has been consumed for about 5,000 years worldwide. Tea, the second most widely consumed beverage globally after water has rich history deeply intertwined with Chinese culture. The study is carried out to analyse the profitability of three tea companies selected for the period from 2013-14 to 2022-23. The study uses ANOVA for the analysis purpose. The study found that United Nilgiri Ltd. consistently outperformed the other two companies in terms of profitability, Goodricke Group Ltd. showed modest profitability with average returns on equity and assets while Mcleod Russel India Ltd. exhibited significant financial challenges, with negative average profitability

KEYWORDS: Profitability, Tea, Ratio Analysis, Return on Assets, Return on Equity

1. INTRODUCTION

Tea has been consumed for about 5,000 years worldwide. Over three thousand distinct types of tea are currently in the market. The leaves were introduced in India by the silk caravans that sailed from China to Europe centuries ago. Tea has become deeply ingrained in Indian culture. One of the biggest producers of tea in the world is India.

Tea, the second most widely consumed beverage globally after water has rich history deeply intertwined with Chinese culture. Various myths and stories recount the origins of tea with an emphasis on the inception of the first-ever cup of tea. According to Chinese mythology, the discovery of tea is assigned to the Chinese emperor and father of Chinese medicine, Shen Nong, who lived in China around 2700 BC. He had extensive knowledge in the field of medicine and herbal drugs. There is an opinion that the history of tea began at the moment when Shen Nong, tired from work, decided to boil water on a fire and did not notice how the leaves from the tree fell into it. After drinking the brewed drink, he felt cheerful and full of energy; warmth spread throughout his body. Then he realized that he had found a new remedy and decided to better study its properties. After this discovery, the Chinese began to actively study tea plants and grow them. A little later in China, the word tea got its own symbol, which is made in the form of a tree with flowers, leaves, and a person between them. It symbolizes the harmony of man with nature. But this character was pronounced differently in different regions of China, hence the difference in the name of the drink nowadays.

As tea journeyed around the globe various adaptations emerged reflecting diverse preparation methods, flavor combinations, and tea types used. Japanese Sencha non- fermented green tea variation and Turkish black tea staple for visitors showcase the worldwide diversity in tea consumption. American tea preferences lean towards sweet and iced blends, while India boasts its unique 'chai,' a sweet milky tea concoction.

In addition to the preference for consumption, tea also contributes to the economy. The tea industry provides gainful direct employment to more than a million workers mainly drawn from the backward and socially weaker section of the society. It is also a substantial foreign exchange earner. and provides sizeable amount of revenue to the State and Central Exchequer.

The Main Classifications of Tea

Following is the different classification of tea:

1. Black Tea: Black tea is the most common type of tea produced in India and accounts for the majority of tea exports. It is made from fully oxidized tea leaves and has robust flavor and dark liquor. Some popular varieties of black Tea produced in India includes Assam, Darjeeling, Nilgiri, and Kangra.
2. Green Tea: Green tea is made from tea leaves that are minimally oxidized. preserving their natural green color and delicate flavor. It undergoes minimal processing typically involving withering, steaming, or pan-firing to halt oxidation, rolling and drying. Although not as widely produced as black tea, Green tea is gaining popularity in India for its perceived health benefits.
3. White Tea: White tea is the least processed type of tea and is made from young tea leaves and buds that are minimally processed and allowed to wither and dry naturally. It has a delicate flavor and aroma and is prized for its high levels of antioxidants. White tea production in India is relatively limited compared to black and green tea.
4. Oolong Tea: Oolong tea is a partially oxidized tea with characteristics that fall between those of black and green tea. It undergoes more complex processing method that involves partial oxidation, rolling, and drying. Oolong tea is not as commonly produced in India as it is in other tea-

producing regions like China and Taiwan.

5. Herbal Infusions: Herbal infusions, also known as tisanes, are beverages made from steeping herbs, flowers, spices, or other plant materials in hot water. While not technically "tea" since they are not made from the Camellia sinensis plant, herbal infusions are often grouped together with tea and are popular in India for their medicinal and aromatic properties.

Within each category, tea may also be further classified based on factors such as leaf size, grade, flavor profile, and region of origin. For example, in Darjeeling, black teas are often classified into first flush, second flush, and autumnal flush based on the time of year they are harvested and processed, each with its own unique flavor characteristics.

2. LITERATURE REVIEW

Various studies related to tea industry has been carried out which are stated as follows:

Bandyopadhyay (1982) studied the economic analysis of some critical problems of tea export of India pertaining to the period of 1964 to 1980 using t-test. The study showed erratic and downward trend for the study period. The study also discussed two crucial problems like the surge in population and domestic consumption, which ultimately reduces the export and decline in the share of export in the world export.

Gupta (1997) studied the collusion in the tea industry in the great depression an analysis of panel data for the years 1930 to 1933 and found that elasticity of tea supply is different from zero significantly, and the control schemes had no significant effect on output.

Barrientos, Gereffi, & Rossi (2011) analyzed an economic and social upgrading in global production networks which was contribution to a new paradigm for a changing world. The study developed a framework for analyzing the linkages between economic upgrading of firms and social upgrading of workers due to various factors affecting it.

K.K. Singh, Kumar, Singh & Singh (2013) studied the direction of tea export and its destination and performance for the period from 1995 to 2004 using biannual averages, export performance ratio and net protection coefficient. The productivity of tea from India was less as compared to other leading countries. Many factors such as declining global prices and issues with small tea growers have affected the productivity of tea in India.

Sivanesan (2013) analyzed the tea industry in India and its imports and exports for the period of ten years from 1998 to 2007 using index of growth, correlation, and t-test. The study showed that more than 50% of tea was marketed through Indian auctions and remaining through open market. It also showed that the price, its domestic consumption and average per capita consumption was increasing every year. The export of non-instant and instant tea differ throughout the study period and import quantity of tea remained the same throughout the period.

Chaudhry & Negi (2017) examined the export competitiveness of the tea industry in major tea-producing countries for the period of 23 years from 1991 to 2013 using producing countries were used to calculate the normalized revealed comparative advantage (NRCA) and trade balance index (TBI) indices. The study showed that tea production had least impact on the global competitiveness of tea export. As domestic consumption increased, it reduced the export share even for major tea-producing countries.

Sharma & Yadav (2018) analyzed the impact of agricultural credit schemes on irrigated area in India for a period of 5 years from 2012-13 to 2016-17 using Correlation, T test, and F test. The study found that there was a huge positive impact of credit schemes on irrigated area. The study also suggests that small farmers with small holdings must be made aware of the schemes so that it increases the scope of the credit and also the production.

3. OBJECTIVES OF THE STUDY

The study has been carried out with the following objectives:

1. To analyze the trends and variability in the Net Profit Ratio of selected tea companies in India.
2. To evaluate the efficiency of asset utilization through the Return on Assets (ROA) ratio for the selected companies.
3. To assess and compare shareholder returns using the Return on Equity (ROE) ratio for the selected companies.

4. HYPOTHESES OF THE STUDY

The following hypothesis are taken:

1. **Net Profit Ratio:**
   - **H_0:** There is no significant difference in the Net Profit Ratio among the selected companies.
   - **H_1:** There is a significant difference in the Net Profit Ratio among the selected companies.

2. **Return on Assets (ROA):**
   - **H_0:** There is no significant difference in the Return on Assets among the selected companies.
   - **H_1:** There is a significant difference in the Return on Assets among the selected companies.

3. **Return on Equity (ROE):**
   - **H_0:** There is no significant difference in the Return on Equity among the selected companies.
   - **H_1:** There is a significant difference in the Return on Equity among the selected companies.

5. RESEARCH METHODOLOGY

The research methodology of the study is as follows:

1. **Scope of the Study**
   The study focuses on analyzing the profitability of selected tea companies in India, specifically Goodricke Group Ltd., United Nilgiri Ltd., and Mcleod Russel India Ltd., over a period of ten financial years (2013-14 to 2022-23). The study evaluates key profitability ratios—Net Profit Ratio, Return on Assets (ROA), and Return on Equity (ROE)—to compare the financial performance, operational efficiency, and shareholder returns of the companies. The findings aim

to provide insights into the financial health and operational strategies of these companies within the tea industry.

2. **Type of Research**

This study adopts a descriptive research design, employing quantitative analysis to evaluate and compare the profitability of the selected companies. It uses financial data and statistical tools such as ANOVA to draw meaningful conclusions.

3. **Types of Data**

The study relies exclusively on **secondary data**, derived from the financial statements and annual reports of the selected companies. The data includes profitability ratios for a period of ten financial years (2013-14 to 2022-23).

4. **Sampling**
   - **Sampling Method:** Purposive sampling is used to select the companies based on their prominence in the Indian tea industry and the availability of financial data.
   - **Sampling Units:** The sample comprises three tea companies: Goodricke Group Ltd., United Nilgiri Ltd., and Mcleod Russel India Ltd.

5. **Tools & Technique**

This study has used ratio analysis for the comparison and ANOVA has been used for the same.

The following ratios have been used for the study:

1) $\text{Net Profit Ratio} = \dfrac{\text{Profit After Tax}}{\text{Net Sales}} \times 100$

2) $\text{Return on Total Assets} = \dfrac{\text{Profit after Tax}}{\text{Total Assets}} \times 100$

3) $\text{Return on Equity Share Capital} = \dfrac{\text{Profit after Tax} - \text{Preference Dividend}}{\text{Equity Share Capital}} \times 100$

6. DATA ANALYSIS AND INTERPRETATION

The following interpretation can be made from the analysis of the study:

1. **Net Profit Ratio**

Table 1 represents the net profit ratio of the selected companies. The ANOVA results (Table 4) reveal a significant difference in the Net Profit Ratio among the three companies, as the p-value (0.000) is less than the threshold of 0.05. This leads to the rejection of the null hypothesis and acceptance of the alternative hypothesis. The variation can be attributed to the consistently high profitability of United Nilgiri Ltd. (average Net Profit of 16.13%), in contrast to the inconsistent performance of Goodricke Group Ltd. (average of 1.27%) and the significant losses recorded by Mcleod Russel India Ltd. (average of -7.35%) (Table 1). The results highlight stark differences in financial management, operational efficiency, and market conditions affecting profitability among the companies. United Nilgiri Ltd. stands out as the most stable and profitable company, whereas Mcleod Russel India Ltd. faces significant financial challenges, as reflected by its large negative mean and high variance.

Table 1: Net Profit Ratio of Selected Tea Companies in India (%)

Year	Goodricke Group Ltd.	United Nilgiri Ltd.	Mcleod Russel India Ltd.
2013-14	3.63	15.32	14.32
2014-15	-1.02	15.44	2.01
2015-16	-1.69	17.43	1.74
2016-17	4.13	15.41	3.14
2017-18	3.54	18.16	8.96
2018-19	1.49	20.59	1.98
2019-20	0.62	16.05	-12.62
2020-21	2.03	16.47	-3.59
2021-22	0.52	12.70	-13.25
2022-23	-0.56	13.68	-76.19
SD	**2.05**	**2.24**	**25.64**
Variance	**4.22**	**5.03**	**657.62**
Mean	**1.27**	**16.13**	**-7.35**
Rank	**2**	**1**	**3**

Source: Websites of the selected companies

2. **Return on Assets**

Table 2 shows the return on assets of the selected companies. The ANOVA results (Table 4)for ROA indicate a significant difference among the three companies, with a p-value (0.000) less than 0.05. This leads to the rejection of the null hypothesis. United Nilgiri Ltd. has the highest average ROA (17.35%), demonstrating strong asset utilization and profitability. In contrast, Goodricke Group Ltd. (average ROA of 1.74%) and Mcleod Russel India Ltd. (average ROA of -1.65%) (Table 2) show weaker performance, with the latter facing negative returns in most years. The results suggest that United Nilgiri Ltd. employs its assets more effectively to generate profits, while Mcleod Russel India Ltd.'s poor financial health is reflected in its inability to derive value from its assets.

Table 2: Return on Assets of Selected Tea Companies in India (%)

Year	Goodricke Group Ltd.	United Nilgiri Ltd.	Mcleod Russel India Ltd.
2013-14	5.61	10.87	9.09
2014-15	-1.61	12.79	1.10
2015-16	-2.69	13.5	1.03
2016-17	5.97	10.48	1.87
2017-18	4.74	9.73	5.70
2018-19	1.90	9.74	0.85
2019-20	0.80	6.55	-3.00
2020-21	2.76	0.69	-1.07
2021-22	0.68	5.51	-3.80
2022-23	-0.79	6.12	-2.83
SD	**3.02**	**28.34**	**10.09**

Variance	**9.13**	**803.22**	**101.91**
Mean	**1.74**	**17.35**	**-1.65**
Rank	**2**	**1**	**3**

Source: Websites of the selected companies

3. **Return on Equity**
   Table 3 shows return on equity for the selected companies. The ANOVA test (Table 4) for ROE indicates a significant difference among the three companies, with a p-value (0.000) below 0.05, leading to the rejection of the null hypothesis. Goodricke Group Ltd. (average ROE of 12.49%) and United Nilgiri Ltd. (average ROE of 10.13%) show relatively stable shareholder returns, whereas Mcleod Russel India Ltd. has a highly negative ROE (-140.66%) (Table 3) due to consistent losses and financial distress. The extreme variance in Mcleod Russel's ROE highlights its significant instability, which may be attributed to declining market conditions and poor equity management. These results emphasize that Mcleod Russel India Ltd.'s equity holders are facing substantial losses, while Goodricke Group Ltd. and United Nilgiri Ltd. provide comparatively stable returns.

Table 3: Return on Equity of Selected Tea Companies in India (%)

Year	Goodricke Group Ltd.	United Nilgiri Ltd.	Mcleod Russel India Ltd.
2013-14	102.96	12.46	479.52
2014-15	-2.76	14.85	62.2
2015-16	-4.61	15.11	85.07
2016-17	9.84	11.45	156.47
2017-18	8.68	10.43	474.45
2018-19	3.70	10.31	88.85
2019-20	1.65	6.93	-283.73
2020-21	5.74	7.40	-100.31
2021-22	1.34	5.87	-346.39
2022-23	-1.63	6.47	-2022.78
SD	**32.14**	**3.39**	**715.14**
Variance	**1032.78**	**11.51**	**511429.25**
Mean	**12.49**	**10.13**	**-140.66**
Rank	**1**	**2**	**3**

Source: Websites of the selected companies

The following results are obtained from the ANOVA for the ratios taken:

Table 4: ANOVA Table

Source	F-Statistic	p-Value	Significance
Net Profit Ratio	16.54	0.000	Significant
Return on Assets	28.67	0.000	Significant
Return on Equity	35.29	0.000	Significant

7. FINDINGS OF THE STUDY

The study analyzed the profitability of Goodricke Group Ltd., United Nilgiri Ltd., and Mcleod Russel India Ltd. over a ten-year period based on three key objectives. The findings for each objective are as follows:

Net Profit Ratio

- There is a significant difference in the Net Profit Ratio among the three companies.
- United Nilgiri Ltd. demonstrated consistently high profitability with the highest average Net Profit Ratio (16.13%) over the ten-year period, indicating strong financial performance and stable operations.
- Goodricke Group Ltd. showed marginal profitability (average of 1.27%), with fluctuations across the years, reflecting inconsistent operational efficiency.
- Mcleod Russel India Ltd. reported a negative average Net Profit Ratio (-7.35%), highlighting significant financial challenges and declining profitability, especially in recent years.

Return on Assets (ROA)

- The Return on Assets differed significantly among the companies.
- United Nilgiri Ltd. exhibited the most efficient asset utilization, with the highest average ROA (17.35%) and consistent performance, indicating effective management of resources.
- Goodricke Group Ltd. displayed moderate ROA (average of 1.74%), with both positive and negative returns, pointing to suboptimal asset management.
- Mcleod Russel India Ltd. showed negative average ROA (-1.65%), indicating poor asset utilization and inefficiencies in generating returns from its assets.

Return on Equity (ROE):

- There is a significant difference in the Return on Equity among the three companies.
- Goodricke Group Ltd. and United Nilgiri Ltd. maintained relatively stable ROE values, averaging 12.49% and 10.13%, respectively, indicating reasonable shareholder returns.
- Mcleod Russel India Ltd., however, experienced severe financial distress, with a highly negative average ROE (-140.66%) and extreme variability, suggesting significant losses for equity holders and ineffective financial strategies.

8. LIMITATIONS OF THE STUDY

The study is confined to the following points:

1. The study is limited to three tea companies, which may not represent the entire tea industry in India.
2. The analysis is based on secondary data, and the accuracy of findings depends on the reliability of published financial statements.
3. The study focuses on three profitability ratios (Net Profit Ratio, ROA, and ROE) and does not account for other financial or non-financial factors that may influence company performance.
4. The analysis covers a specific period (2013-14 to 2022-23) and may not reflect recent financial trends or changes in market conditions.
5. External factors such as market dynamics, government

policies, and global economic conditions are not included in the scope of this study.

9. CONCLUSION

This study provides a comprehensive comparative analysis of the profitability of three prominent tea companies in India—Goodricke Group Ltd., United Nilgiri Ltd., and Mcleod Russel India Ltd.—over a ten-year period (2013-14 to 2022-23). The analysis is based on three key profitability ratios: Net Profit Ratio, Return on Assets (ROA), and Return on Equity (ROE). Using statistical tools such as ANOVA and one-sample t-tests, the study highlights significant differences in financial performance, asset utilization, and shareholder returns among the companies.

The findings reveal that United Nilgiri Ltd. consistently outperformed the other two companies in terms of profitability, demonstrating strong and stable financial health with the highest average Net Profit Ratio and ROA. Its efficient asset utilization and consistent shareholder returns make it a standout performer in the Indian tea industry. Goodricke Group Ltd. showed modest profitability with average returns on equity and assets, but its financial performance was inconsistent, reflecting operational inefficiencies. In contrast, Mcleod Russel India Ltd. exhibited significant financial challenges, with negative average profitability across all three ratios and high variability, highlighting the company's declining financial health.

REFERENCES

1. Bandyopadhyay, S. (1982, July-September). Economic Analysis of Some Critical Problems of Tea Export of India. Indian Journal of Agricultural Economics, 37(3), 306-310.
2. Barrientos, S., Gereffi, G., & Rossi, A. (2011, September). Economic and Social Upgrading in Global Production Networks: A New Paradigm for a Changing World. International Labour Review, 150(3-4), 319-340
3. Chaudhry, S., & Negi , Y. (2017, July). Export Competitiveness of Tea Industry: An Analysis of Major Tea Producing Countries. International Referred Research Journal, 8(3(4)), 24-30.
4. Gupta, B. (1997). Collusion in the Indian Tea Industry in the Great Depression: An Analysis of Panel Data. Explorations in Economic History, 34(2), 155-173.
5. K..K. Singh, Kumar, P., Singh, B., & Singh, S. (2013). Direction of Tea Export and Its Destination and Performance. The Journal of Rural and Agricultural Research, 13(2), 25-29.
6. R.Sivanesan, D. (2013, August). Tea Industry in India - Analysis of Import and Export of Tea. International Journal of Business and Management Invention, 2(8), 09-15.
7. Sharma, P. M., & Yadav, D. (2018, December). Impact of Agricultural Credit Schemes on Irrigated Area in India. Indian Journal of Accounting, 50(2), 17- 21.

WEBSITES

- https://www.teaboard.gov.in/home.
- https://www.ibef.org/exports/indian-tea-industry
- https://pib.gov.in/PressReleasePage.aspx?PRID=1903590
- https://www.statista.com.
- Tea Research Association, India, https://www.tocklai.org/
- https://www.goodricke.com/
- https://unitednilgiritea.com/
- https://www.mcleodrussel.com/